

ABSTRACT OF THE DISCLOSURE

**FRAGILE WATER MARK PRINTED WITH TWO
COMPONENT INKS AND PROCESS**

Improvements are provided in processing of documents to increase their security and/or decrease the complexity of testing for authenticity. Methods for printing documents with security markings and methods and apparatus for authenticating documents are described. In one aspect a document is printed with a security marking comprised of an image printed in at least two image segments. The image can be printed with an ink capable of forming images which are visible both to viewing under white light and as fluorescent images when irradiated with ultraviolet light, the segments having features of different sizes. The relative sizes of the two image segments will provide a detectable difference in fluorescent image sharpness. The apparatus provides means, all of which are simple and easily available for carrying out the methods.